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L1 ANSWER 9 OF 10 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
ACCESSION NUMBER: 1998-299133 [27] WPIX DOC, NO. CPI: C1998-093344 [27]
DOC. NO. CPI:
                                New heterocyclyl-fused N-(heterocyclyl-
TITLE:
methyl)pyrazole
                                derivatives - inhibit thrombocyte aggregation,
useful
                                for treating heart and circulatory disease
DERWENT CLASS:
                                B02
INVENTOR:
                                DEMBOWSKY K; FEURER A; FUERSTNER C; FURSTNER C;
HUETTER
                                J; HUTTER J; JAETSCH T; KAST R; PERZBORN E; ROBYR
C;
                                STASCH J; STRAUB A
PATENT ASSIGNEE: (FARB-C) BAYER AG; (FARB-C) BAYER HEALTHCARE AG
COUNTRY COUNT: 79
PATENT INFO ABBR.:
         PATENT NO KIND DATE WEEK LA PG MAIN IPC
         DE 19649460 A1 19980528 (199827)* DE 14[0]
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        WO 9823619
                                A1 19980604 (199828) DE
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        ZA 9710573 A 19980826 (199840) EN 91
AU 9854823 A 19980622 (199844) EN
NO 9902400 A 19990519 (199934) NO
CZ 9901850 A3 19990811 (199937) CS
EP 944631 A1 19990292 (199945) DE
CN 1238773 A 19991215 (200017) ZH
SK 9900676 A3 20000214 (200022) SK
BR 9714363 A 20000214 (200022) PT
        BR 9714363 A 20000321 (200028) PT
HU 2000000562 A2 200001303 (200064) HU
TW 403746 A 20000901 (200112) ZH
AU 729642 B 20010208 (200115) EN
JR 235890 A 20010223 (200115) EN
JF 2001505567 W 20010424 (200130) JA 83
US 6451805 B1 20020917 (200269) # EN
EP 944631 B1 20040218 (200413) DE
ES 9711321 G 20040325 (200423) DE
ES 2214646 T3 20040916 (200462) ES
CN 1122032 C 20030924 (200554) ZH
APPLICATION DETAILS:
                                                                 APPLICATION DATE
         PATENT NO KIND
                                                                 DE 1996-19649460 19961126
         DE 19649460 A1
                                                                  BR 1997-14363 19971114
         BR 9714363 A
                                                                 CN 1997-180065 19971114
         CN 1238773 A
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CN 1122032 C

EP 944631 A1

DE 59711321 G

CN 1997-180065 19971114

EP 1997-951204 19971114

DE 1997-59711321 19971114

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EP 944631 B1
                                          EP 1997-951204 19971114
     DE 59711321 G
                                          EP 1997-951204 19971114
     ES 2214646 T3
                                          EP 1997-951204 19971114
     NZ 335890 A
                                          NZ 1997-335890 19971114
     WO 9823619 A1
                                            ***WO 1997-EP6366
19971114***
     NO 9902400 A
                                          WO 1997-EP6366 19971114
     CZ 9901850 A3
                                          WO 1997-EP6366 19971114
     EP 944631 A1
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     NZ 335890 A
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     EP 944631 B1
                                          WO 1997-EP6366 19971114
     DE 59711321 G
                                          WO 1997-EP6366 19971114
     US 6451805 B1
                                          WO 1997-EP6366 19971114
     TW 403746 A
                                          TW 1997-117406 19971121
     ZA 9710573 A
                                          ZA 1997-10573 19971125
     AU 9854823 A
                                          AU 1998-54823 19971114
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                                          AU 1998-54823 19971114
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     SK 9900676 A3
                                          SK 1999-676 19971114
     US 6451805 B1
                                          US 1999-297121 19990423
     NO 9902400 A
                                          NO 1999-2400 19990519
     HU 2000000562 A2
                                          HU 2000-562 19971114
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FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 729642 B	Previous Pub	1 AU 9854823 A
DE 59711321 G	Based on	EP 944631 A
ES 2214646 T3	Based on	EP 944631 A
AU 9854823 A	Based on	WO 9823619 A
CZ 9901850 A3	Based on	WO 9823619 A
EP 944631 A1	Based on	WO 9823619 A
BR 9714363 A	Based on	WO 9823619 A
HU 2000000562 A	2 Based on	WO 9823619 A
AU 729642 B	Based on	WO 9823619 A
NZ 335890 A	Based on	WO 9823619 A
JP 2001505567 W	Based on	WO 9823619 A
EP 944631 B1	Based on	WO 9823619 A
DE 59711321 G	Based on	WO 9823619 A
US 6451805 B1	Based on	WO 9823619 A

PRIORITY APPLN. INFO: DE 1996-19649460 19961126 US 1999-297121 19990423

AN 1998-299133 [27] WPIX

AB DE 19649460 A1 UPAB: 20060114

Substituted fused pyrazole derivatives of formula (I), their isomers and $% \left\{ 1\right\} =\left\{ 1\right\} =\left$

salts, are new. R1 = 5-6 membered Het (optionally bound via a N atom),

(optionally mono- to tri- substituted by CHO, COOH, OH, 1-6C acyl, 1-6C $\,$

```
alkoxy, 1-6C alkoxycarbonyl, NO2, CN, halo, Ph or 1-6C alkyl
(optionally
     substituted by OH, NH2, N3, COOH, 1-5C acyl, 1-5C alkoxy, 1-5C
     alkoxycarbonyl, 1-5C acylamino or OR4) and/or a group of formula
     (b)); Het = saturated or aromatic heterocycle containing 1-3
heteroatoms
     selected from S, N and/or O; R4 = 1-5C acvl or SiR5R6R7; R5-R7 =
6-10C
     aryl or 1-6C alkyl; a = 1-3; R8 = H or 1-4C alkyl; R2+R3 complete
     6-membered Het (optionally mono- to tri- substituted by CHO, COOH,
OH. SH.
     NH2, 1-6C acyl, 1-6C alkylamino, 1-6C alkylthio, 1-6C alkoxy, 1-6C
     alkoxycarbonyl, NO2, CN, halo, phenyl or 1-6C alkyl (optionally
     substituted by OH, NH2, COOH, 1-5C acvl, 1-5C alkoxy or 1-5C
     alkoxycarbonyl; A = 5-6 membered Het or phenyl, (both optionally
mono- to
     tri- substituted by NH2, SH, OH, CHO, COOH, 1-6C acyl, 1-6C
alkvlthio,
     1-6C alkoxyacyl, 1-6C alkoxy, 1-6C alkoxycarbonyl, NO2, CN, CF3,
N3, halo,
     phenyl or 1-6C alkyl (optionally substituted by OH, COOH, 1-5C
acyl, 1-5C
     alkoxy, 1-5C alkoxycarbonyl, NR9R10 or CONR9R10; R9, R10 = H,
phenyl,
     benzyl, 1-5C alkyl or 1-5C acyl.
           USE - (I) are used to treat heart and circulatory disease
(claimed).
     (I) are thrombocyte aggregation inhibitors and vasodilators,
leading to
     reduction in blood pressure. (I) act by direct stimulation of
     quanylate cyclase, and indirectly, by increasing the effects of
     substances, such as endothelium-derived relaxing factor, NO-
donors,
     protoporphyrin IX, arachidonic acid and phenylhydrazine
derivatives. (I)
     are useful for treating hypertension, cardiac insufficiency,
angina
     pectoris, cardiac and peripheral circulation disorders,
arrhythmia,
     thromboembolic and ischaemic diseases such as myocardial infarct,
stroke.
     prevention of restenosis following percutaneous transluminal
angioplasty,
     bypass, arteriosclerosis, urogenital disorders such as prostate
     hypertrophy, erectile dysfunction and incontinence. - Dosage is
0.5-500
     (preferably 5-100) mg/kg/day.
Member (0002)
ABEO WO 1998023619 A1
                        UPAB 20060114
     Substituted fused pyrazole derivatives of formula (I), their
isomers and
     salts, are new. R1 = 5-6 membered Het (optionally bound via a N
atom),
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```
(optionally mono- to tri- substituted by CHO, COOH, OH, 1-6C acyl,
1-6C
     alkoxy, 1-6C alkoxycarbonyl, NO2, CN, halo, Ph or 1-6C alkyl
(optionally
     substituted by OH, NH2, N3, COOH, 1-5C acyl, 1-5C alkoxy, 1-5C
     alkoxycarbonyl, 1-5C acylamino or OR4) and/or a group of formula
     (b)); Het = saturated or aromatic heterocycle containing 1-3
heteroatoms
     selected from S, N and/or O; R4 = 1-5C acvl or SiR5R6R7; R5-R7 =
6-10C
     aryl or 1-6C alkyl; a = 1-3; R8 = H or 1-4C alkyl; R2+R3 complete
     6-membered Het (optionally mono- to tri- substituted by CHO, COOH,
OH, SH,
     NH2, 1-6C acyl, 1-6C alkylamino, 1-6C alkylthio, 1-6C alkoxy, 1-6C
     alkoxycarbonyl, NO2, CN, halo, phenyl or 1-6C alkyl (optionally
     substituted by OH, NH2, COOH, 1-5C acyl, 1-5C alkoxy or 1-5C
     alkoxycarbonyl; A = 5-6 membered Het or phenyl, (both optionally
mono- to
     tri- substituted by NH2, SH, OH, CHO, COOH, 1-6C acvl, 1-6C
alkvlthio,
     1-6C alkoxyacyl, 1-6C alkoxy, 1-6C alkoxycarbonyl, NO2, CN, CF3,
N3, halo,
     phenyl or 1-6C alkyl (optionally substituted by OH, COOH, 1-5C
acyl, 1-5C
     alkoxy, 1-5C alkoxycarbonyl, NR9R10 or CONR9R10; R9, R10 = H.
phenyl,
     benzyl, 1-5C alkyl or 1-5C acyl.
           USE - (I) are used to treat heart and circulatory disease
(claimed).

    are thrombocyte aggregation inhibitors and vasodilators,

leading to
     reduction in blood pressure. (I) act by direct stimulation of
     quanylate cyclase, and indirectly, by increasing the effects of
     substances, such as endothelium-derived relaxing factor, NO-
donors,
     protoporphyrin IX, arachidonic acid and phenylhydrazine
derivatives. (I)
     are useful for treating hypertension, cardiac insufficiency,
angina
     pectoris, cardiac and peripheral circulation disorders,
arrhythmia,
     thromboembolic and ischaemic diseases such as myocardial infarct,
stroke.
     prevention of restenosis following percutaneous transluminal
angioplasty,
     bypass, arteriosclerosis, urogenital disorders such as prostate
     hypertrophy, erectile dysfunction and incontinence. - Dosage is
0.5-500
     (preferably 5-100) mg/kg/day.
Member (0007)
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ABEQ EP 944631 A1

isomers and

UPAB 20060114

Substituted fused pyrazole derivatives of formula (I), their

```
salts, are new. R1 = 5-6 membered Het (optionally bound via a N
atom).
     (optionally mono- to tri- substituted by CHO, COOH, OH, 1-6C acyl,
1-6C
     alkoxy, 1-6C alkoxycarbonyl, NO2, CN, halo, Ph or 1-6C alkyl
(optionally
     substituted by OH, NH2, N3, COOH, 1-5C acyl, 1-5C alkoxy, 1-5C
     alkoxycarbonyl, 1-5C acylamino or OR4) and/or a group of formula
     (b)); Het = saturated or aromatic heterocycle containing 1-3
heteroatoms
     selected from S, N and/or O; R4 = 1-5C acvl or SiR5R6R7; R5-R7 =
6-10C
     arvl or 1-6C alkvl; a = 1-3; R8 = H or 1-4C alkvl; R2+R3 complete
     6-membered Het (optionally mono- to tri- substituted by CHO, COOH,
OH, SH,
     NH2, 1-6C acyl, 1-6C alkylamino, 1-6C alkylthio, 1-6C alkoxy, 1-6C
     alkoxycarbonyl, NO2, CN, halo, phenyl or 1-6C alkyl (optionally
     substituted by OH, NH2, COOH, 1-5C acyl, 1-5C alkoxy or 1-5C
     alkoxycarbonyl; A = 5-6 membered Het or phenyl, (both optionally
mono- to
     tri- substituted by NH2, SH, OH, CHO, COOH, 1-6C acyl, 1-6C
alkylthio,
     1-6C alkoxyacvl, 1-6C alkoxy, 1-6C alkoxycarbonyl, NO2, CN, CF3,
N3. halo.
     phenyl or 1-6C alkyl (optionally substituted by OH, COOH, 1-5C
acyl, 1-5C
     alkoxy, 1-5C alkoxycarbonyl, NR9R10 or CONR9R10; R9, R10 = H,
phenyl,
     benzvl, 1-5C alkyl or 1-5C acvl.
           USE - (I) are used to treat heart and circulatory disease
(claimed).

    are thrombocyte aggregation inhibitors and vasodilators,

leading to
     reduction in blood pressure. (I) act by direct stimulation of
     guanylate cyclase, and indirectly, by increasing the effects of
     substances, such as endothelium-derived relaxing factor, NO-
     protoporphyrin IX, arachidonic acid and phenylhydrazine
derivatives. (I)
     are useful for treating hypertension, cardiac insufficiency,
     pectoris, cardiac and peripheral circulation disorders,
arrhythmia,
     thromboembolic and ischaemic diseases such as myocardial infarct,
stroke,
     prevention of restenosis following percutaneous transluminal
angioplasty,
     bypass, arteriosclerosis, urogenital disorders such as prostate
     hypertrophy, erectile dysfunction and incontinence. - Dosage is
0.5 - 500
     (preferably 5-100) mg/kg/day.
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Member (0008) ABEQ CN 1238773 A UPAB 20060114

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Substituted fused pyrazole derivatives of formula (I), their
isomers and
     salts, are new. R1 = 5-6 membered Het (optionally bound via a N
     (optionally mono- to tri- substituted by CHO, COOH, OH, 1-6C acyl,
1-6C
     alkoxy, 1-6C alkoxycarbonyl, NO2, CN, halo, Ph or 1-6C alkyl
(optionally
     substituted by OH, NH2, N3, COOH, 1-5C acvl, 1-5C alkoxy, 1-5C
     alkoxycarbonyl, 1-5C acylamino or OR4) and/or a group of formula
     (b)); Het = saturated or aromatic heterocycle containing 1-3
heteroatoms
     selected from S. N and/or O: R4 = 1-5C acvl or SiR5R6R7; R5-R7 =
6-10C
     aryl or 1-6C alkyl; a = 1-3; R8 = H or 1-4C alkyl; R2+R3 complete
     6-membered Het (optionally mono- to tri- substituted by CHO, COOH,
OH, SH,
     NH2, 1-6C acyl, 1-6C alkylamino, 1-6C alkylthio, 1-6C alkoxy, 1-6C
     alkoxycarbonyl, NO2, CN, halo, phenyl or 1-6C alkyl (optionally
     substituted by OH, NH2, COOH, 1-5C acyl, 1-5C alkoxy or 1-5C
     alkoxycarbonyl; A = 5-6 membered Het or phenyl, (both optionally
mono- to
     tri- substituted by NH2, SH, OH, CHO, COOH, 1-6C acvl, 1-6C
alkvlthio,
     1-6C alkoxyacyl, 1-6C alkoxy, 1-6C alkoxycarbonyl, NO2, CN, CF3,
N3, halo,
     phenyl or 1-6C alkyl (optionally substituted by OH, COOH, 1-5C
acyl, 1-5C
     alkoxy, 1-5C alkoxycarbonyl, NR9R10 or CONR9R10; R9, R10 = H,
phenvl.
     benzyl, 1-5C alkyl or 1-5C acyl.
           USE - (I) are used to treat heart and circulatory disease
     (I) are thrombocyte aggregation inhibitors and vasodilators,
leading to
     reduction in blood pressure. (I) act by direct stimulation of
soluble
     quanylate cyclase, and indirectly, by increasing the effects of
     substances, such as endothelium-derived relaxing factor, NO-
     protoporphyrin IX, arachidonic acid and phenylhydrazine
derivatives. (I)
     are useful for treating hypertension, cardiac insufficiency,
     pectoris, cardiac and peripheral circulation disorders,
arrhythmia,
     thromboembolic and ischaemic diseases such as myocardial infarct,
stroke,
     prevention of restenosis following percutaneous transluminal
angioplasty,
     bypass, arteriosclerosis, urogenital disorders such as prostate
     hypertrophy, erectile dysfunction and incontinence. - Dosage is
0.5-500
     (preferably 5-100) mg/kg/day.
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Member (0012)
ABEQ TW 403746 A UPAB 20060114
     Substituted fused pyrazole derivatives of formula (I), their
isomers and
     salts, are new. R1 = 5-6 membered Het (optionally bound via a N
atom),
     (optionally mono- to tri- substituted by CHO, COOH, OH, 1-6C acyl,
1-6C
     alkoxy, 1-6C alkoxycarbonyl, NO2, CN, halo, Ph or 1-6C alkyl
(optionally
     substituted by OH, NH2, N3, COOH, 1-5C acyl, 1-5C alkoxy, 1-5C
     alkoxycarbonyl, 1-5C acylamino or OR4) and/or a group of formula
(a) or
     (b)); Het = saturated or aromatic heterocycle containing 1-3
heteroatoms
     selected from S, N and/or O; R4 = 1-5C acyl or SiR5R6R7; R5-R7 =
6-10C
     aryl or 1-6C alkyl; a = 1-3; R8 = H or 1-4C alkyl; R2+R3 complete
     6-membered Het (optionally mono- to tri- substituted by CHO, COOH,
OH, SH,
     NH2, 1-6C acyl, 1-6C alkylamino, 1-6C alkylthio, 1-6C alkoxy, 1-6C
     alkoxycarbonyl, NO2, CN, halo, phenyl or 1-6C alkyl (optionally
     substituted by OH, NH2, COOH, 1-5C acyl, 1-5C alkoxy or 1-5C
     alkoxycarbonyl; A = 5-6 membered Het or phenyl, (both optionally
mono- to
     tri- substituted by NH2, SH, OH, CHO, COOH, 1-6C acyl, 1-6C
alkvlthio,
     1-6C alkoxyacyl, 1-6C alkoxy, 1-6C alkoxycarbonyl, NO2, CN, CF3,
N3, halo,
     phenyl or 1-6C alkyl (optionally substituted by OH, COOH, 1-5C
acvl, 1-5C
     alkoxy, 1-5C alkoxycarbonyl, NR9R10 or CONR9R10; R9, R10 = H,
phenyl,
     benzyl, 1-5C alkyl or 1-5C acyl.
           USE - (I) are used to treat heart and circulatory disease
(claimed).
     (I) are thrombocyte aggregation inhibitors and vasodilators,
leading to
     reduction in blood pressure. (I) act by direct stimulation of
soluble
     quanylate cyclase, and indirectly, by increasing the effects of
     substances, such as endothelium-derived relaxing factor, NO-
     protoporphyrin IX, arachidonic acid and phenylhydrazine
derivatives. (I)
     are useful for treating hypertension, cardiac insufficiency,
     pectoris, cardiac and peripheral circulation disorders,
arrhythmia,
     thromboembolic and ischaemic diseases such as myocardial infarct,
stroke,
     prevention of restenosis following percutaneous transluminal
angioplasty,
     bypass, arteriosclerosis, urogenital disorders such as prostate
     hypertrophy, erectile dysfunction and incontinence. - Dosage is
```

0.5-500

```
(preferably 5-100) mg/kg/day.
Member (0015)
ABEO JP 2001505567 W
                     UPAB 20060114
     Substituted fused pyrazole derivatives of formula (I), their
isomers and
     salts, are new. R1 = 5-6 membered Het (optionally bound via a N
atom).
     (optionally mono- to tri- substituted by CHO, COOH, OH, 1-6C acyl,
1-6C
     alkoxy, 1-6C alkoxycarbonyl, NO2, CN, halo, Ph or 1-6C alkyl
(optionally
     substituted by OH, NH2, N3, COOH, 1-5C acyl, 1-5C alkoxy, 1-5C
     alkoxycarbonyl, 1-5C acylamino or OR4) and/or a group of formula
(a) or
     (b)); Het = saturated or aromatic heterocycle containing 1-3
heteroatoms
     selected from S, N and/or O; R4 = 1-5C acyl or SiR5R6R7; R5-R7 =
6-10C
     arvl or 1-6C alkyl; a = 1-3; R8 = H or 1-4C alkyl; R2+R3 complete
     6-membered Het (optionally mono- to tri- substituted by CHO, COOH,
OH, SH,
     NH2, 1-6C acvl, 1-6C alkylamino, 1-6C alkylthio, 1-6C alkoxy, 1-6C
     alkoxycarbonyl, NO2, CN, halo, phenyl or 1-6C alkyl (optionally
     substituted by OH, NH2, COOH, 1-5C acyl, 1-5C alkoxy or 1-5C
     alkoxycarbonyl; A = 5-6 membered Het or phenyl, (both optionally
mono- to
     tri- substituted by NH2, SH, OH, CHO, COOH, 1-6C acyl, 1-6C
     1-6C alkoxyacyl, 1-6C alkoxy, 1-6C alkoxycarbonyl, NO2, CN, CF3,
N3, halo,
     phenyl or 1-6C alkyl (optionally substituted by OH, COOH, 1-5C
acvl, 1-5C
     alkoxy, 1-5C alkoxycarbonyl, NR9R10 or CONR9R10; R9, R10 = H,
phenyl,
     benzyl, 1-5C alkyl or 1-5C acyl.
           USE - (I) are used to treat heart and circulatory disease
(claimed).
     (I) are thrombocyte aggregation inhibitors and vasodilators,
     reduction in blood pressure. (I) act by direct stimulation of
soluble
     quanvlate cyclase, and indirectly, by increasing the effects of
     substances, such as endothelium-derived relaxing factor, NO-
donors.
     protoporphyrin IX, arachidonic acid and phenylhydrazine
derivatives. (I)
     are useful for treating hypertension, cardiac insufficiency,
angina
     pectoris, cardiac and peripheral circulation disorders,
arrhythmia,
     thromboembolic and ischaemic diseases such as myocardial infarct,
stroke.
```

prevention of restenosis following percutaneous transluminal

bypass, arteriosclerosis, urogenital disorders such as prostate

angioplasty,

hypertrophy, erectile dysfunction and incontinence. - Dosage is 0.5-500 (preferably 5-100) mg/kg/day.